

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF NORTH CAROLINA  
WESTERN DIVISION  
No. 5:22-CV-00015-FL**

ROBERT TERRACINO and  
BRADIE TERRACINO,

Plaintiffs,

v.

TRIMACO, INC.,

Defendant.

**DEFENDANT TRIMACO, INC.'S  
OPENING CLAIM CONSTRUCTION BRIEF**

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Defendant Trimaco, Inc. (“Trimaco”) hereby submits its Opening Claim Construction Brief concerning the construction of claim terms of U.S. Patent No. 9,044,917 (the “’917 patent”).

## **I. INTRODUCTION**

Trimaco’s constructions comport with the plain language of the claim terms and basic principles of claim construction – such as the distinction between “comprising” and “consisting of”<sup>1</sup>— and take into account Plaintiffs’ clear and significant limiting of their proposed patent claims during prosecution. In addition, the patent claims are indefinite pursuant to 35 U.S.C. § 112 because no Person of Ordinary Skill in the Art (“POSITA”) could understand their metes and bounds.

## **II. BACKGROUND**

### **A. The Patent**

The ’917 Patent is entitled “Non-Skid Protective Cloth or Pad” and describes its invention as “[a] two-layer, non-skid protective cloth or pad for use as a painter’s drop cloth or as a protective pad for surfaces such as boat decks, airplane wings or other surfaces where a non-skid pad is essential.” *See* Abstract. The structure of this cloth or pad consists of “a woven upper member, typically of a cotton canvas-like material, and a lower, resilient member.” *Id.* These two members, or layers, “are typically stitched together.” *Id.* The lower layer includes “downward-projecting bumps, often of two or more sizes . . . joined by a grid of resilient material.” *Id.*

The ’917 Patent includes two independent claims and eight dependent claims, all of which are alleged to be infringed. Claim 1 exemplifies the core patent claim limitations at issue, with those limitations highlighted in bold in the below:

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<sup>1</sup> This significant distinction, which resolves all claims against Trimaco’s Stay Put® Plus products, will be discussed in detail below.

<b>1. A non-skid protective cloth or pad, consisting of:</b>
<b>a)</b> a single, absorbent, plain woven upper layer free from any projecting cut pile and having an upper and a lower major surface;
<b>b)</b> a single, lower, resilient layer having an upper and a lower major surface, <b>said upper major surface of said single lower resilient layer being disposed adjacent said lower layer</b> of said single, absorbent, woven upper layer, said lower resilient layer comprising a network of downward projecting bumps interconnected one to another by a resilient grid, <b>said downward projecting bumps comprising bumps having at least two different circumferential sizes</b> , said downward projecting bumps each having a height, <b>said height of bumps having the smaller of said at least two different circumferential sizes being greater than said height of bumps having said larger of said at least two circumferential sizes</b> ; and
<b>c)</b> stitching disposed through both said single, absorbent, upper, woven layer and said single lower resilient layer, whereby <b>when said lower major surface of said single lower resilient layer is placed on a support surface, a Sliding Coefficient of Friction measured in accordance with TAPPI T548 specification is greater than approximately 0.75.</b>

In addition to the claim limitations of claim 1, two limitations are in dispute in connection with patent claims 4, 6, and 9: “amorphous” (claims 4 and 9) and “whereby when tested in accordance with TAPPI T548 specification, an average slide angle is no less than approximately 40° (claim 6).”

## **B. The Prosecution History**

The prosecution history of the '917 patent is highly relevant to the construction of the claim terms at issue because Plaintiffs narrowed the scope of their claims significantly to obtain allowance. Highlights thereof are discussed below.

### ***1. The Parent Application***

The first application filed in connection with this “non-skid protective cloth or pad” was filed on July 27, 2009, Application No. 12/460,763. The first draft claim 1 read as follows:

What is claimed is:

1. A non-skid protective cloth or pad, comprising:

a) a woven, upper layer having an upper and a lower major surface;

b) a lower, resilient layer having an upper and a lower major surface, said upper major surface of said lower resilient layer being disposed adjacent said lower layer of said woven upper layer; and

c) means for fastening said upper, woven layer to said lower resilient layer.

Parent App. Prosecution History at 189 (“Parent App.”) (Ex. 1). Notably, this proposed claim was open-ended in using the transitional phrase “comprising.” In addition, this initial claim sought broad coverage of an upper woven layer attached to a bottom resilient layer with “means for fastening” the two, with no other limitations on scope, including the number of layers.

The Examiner rejected each of the proposed claims, including the dependent claims, as obvious over the prior art, including U.S. Patent No. 6,296,919 (“Rockwell”). According to the Examiner, Rockwell taught a “*multilayered* composite structure” and “a non-slip cushioned, anti-fatigue carpeted floor covering article which permits cleaning of a pedestrian’s footwear” and imparted “non-slip benefits.” Parent App. at 153 (emphasis added). In response to this rejection,

Plaintiffs amended claim 1 to restrict the number of layers by adopting the term “consisting of,” which is a limiting transitional phrase<sup>2</sup>:

Claim 1. (currently amended) A non-skid protective cloth or pad, ~~comprising~~ consisting of:

a) a single, absorbent, plain woven upper layer free from any protecting cut pile and having an upper and a lower major surface;

b) a single lower, resilient layer having an upper and a lower major surface, said upper major surface of said single lower resilient layer being disposed adjacent said lower layer of said single, absorbent, woven upper layer; and

c) means for fastening said single, absorbent, upper, woven layer to said single lower resilient layer.

*Id.* at 139-40. These amendments were significant, and especially in terms of whether Plaintiffs’ patent claims were drafted to cover a multi-layered cloth or pad, or only a two-layered cloth or pad. With the change from “comprising” to “consisting of” as well as Plaintiffs’ addition of “single,” they limited their coverage to a cloth or pad with two layers only. Accordingly, in the next office action, which was a final rejection, the Examiner confirmed that, “*Applicant has amended the preamble language of the claim by closing up the recitation and making it a two layered structure.*” *Id.* at 122 (emphasis added).

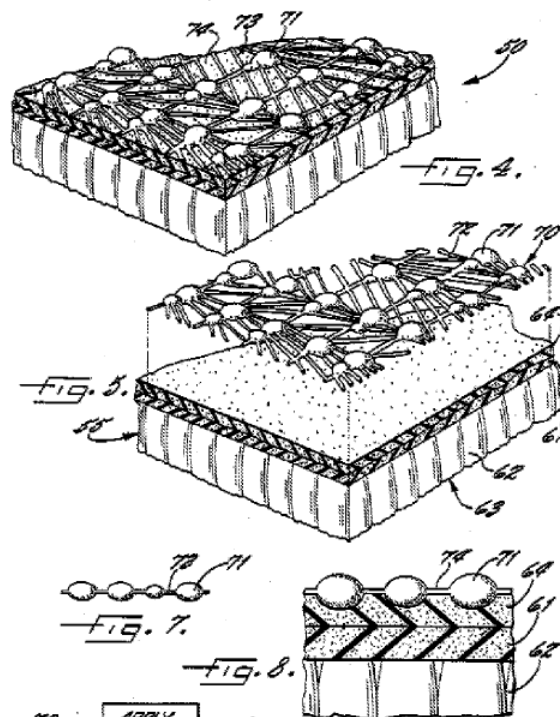
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<sup>2</sup> See, e.g., Manual of Patent Examining & Procedure (“M.P.E.P.”) at Section 2111.03 (Transitional Phrases) (“The transitional phrase “consisting of” excludes any element, step, or ingredient not specified in the claim.”) (citations omitted).

The Examiner persisted, however, in rejecting even the “closed” patent claims, issuing rejections on grounds of 35 U.S.C. § 112 (written description) and § 103(a) (obviousness) in view of multiple prior art references. *Id.* at 123-25. In response, Plaintiffs amended the specification to clarify certain terminology, and filed a “request for continued examination.” *Id.* at 98, 103-06. The Examiner, however, continued to reject their proposed patent claims in view of the prior art. *Id.* at 82-86. The Examiner focused heavily on U.S. Patent No. 5,567,497 (“Zegler”) (Ex. 5), which he described as teaching a layered floor covering with “thermoplastic projections, exemplified by dimples or nodules” that would “impart skid resistance.” *Id.* at 83.

The Examiner’s excerpt from Zegler, showing roughly circular bumps in various shapes and sizes, is below (*id.* at 84):

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Art Unit: 1786



The Examiner also concluded that, although Zegler did not teach an absorbent “face” layer like Plaintiffs’ proposed claims, this attribute was obvious in view of other prior art. *Id.* at 85-86.

In response, Plaintiffs distinguished Zegler by arguing that the multi-layer “fused thermoplastic layer” of Zegler was not the same as a “single lower, resilient layer” and asserted that their invention was distinct in light of Zegler’s third layer. *Id.* at 74-75. Neither these arguments, nor an in-person meeting—in which Plaintiffs brought samples of their product—led to issuance. *Id.* at 47. The Examiner suggested that “structural characteristics and numerical values for physical properties” might be added, assuming the application included subject matter support. *Id.* at 40. This application was ultimately abandoned. *Id.* at 1.

## **2. The Patent in Suit Application**

Plaintiffs filed Application No. 14/044,130 on October 2, 2013. Denoted a continuation-in-part application, it matured into the ’917 patent at issue in this matter. The original claim 1 that was filed is below:

What is claimed is:

1. A non-skid protective cloth or pad, consisting of:

- a) a single, absorbent, plain woven upper layer free from any projecting cut pile and having an upper and a lower major surface;
- b) a single lower, resilient layer having an upper and a lower major surface, said upper major surface of said single lower resilient layer being disposed adjacent said lower layer of said single, absorbent, woven upper layer; and
- c) means for fastening said single, absorbent, upper, woven layer to said single lower resilient layer;

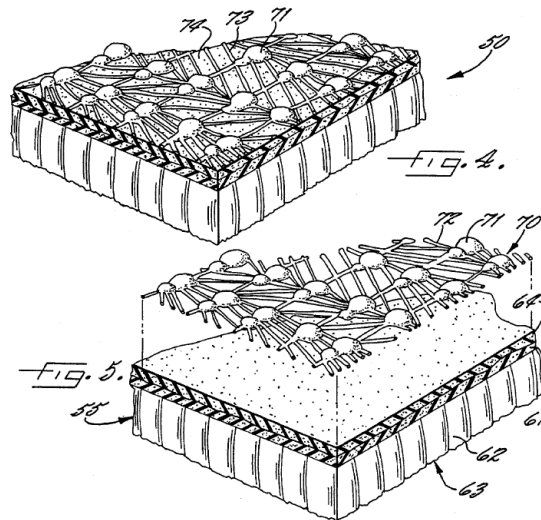
whereby when said lower major surface of said single lower resilient layer is placed on a support surface, a Sliding Coefficient of Friction measures in accordance with TAPPI T548 specification is greater than approximately 0.75.

Patent in Suit Application Prosecution History at 173 (“Patent in Suit App.”) (Ex. 2). Notably, Plaintiffs retained their restrictive claim language, including the transitional phrase “consisting of” and the word “single.” Thus, they acquiesced in the Examiner’s requirement that the proposed mat “consist of” only two layers. In addition, Plaintiffs added the reference to the TAPPI T548 specification to claim 1 in an apparent nod to the Examiner’s suggestion to add numerical values.

The Examiner issued a first rejection that continued to focus on obviousness (Section 103) in view of the prior art, including, once again, Zegler. In response to those rejections, Plaintiffs amended claim 1, *inter alia*, to limit it to covering stitching as the fastening means and further to limit the lower surface of the resilient layer to “irregular” surfaces. *Id.* at 92-93, 99. This, yet again, was not enough to gain allowance.

The Examiner next suggested additional “narrowing of the independent claims in order to advance prosecution.” *Id.* at 70. A final rejection followed, in which the Examiner continued to maintain rejections pursuant to Section 103, in light of Zegler as well as multiple other prior art. *Id.* at 55-60. He noted that, “Zegler teaches that the thermoplastic contact layer 40 includes on its lower surface a plurality of shallow thermoplastic projections, exemplified by dimples or nodules in FIG. 4-8, which extend away from the face layer 30.” *Id.* at 56.

Indeed, Zegler shows bumps of varying sizes, with most of the circumferentially larger bumps being taller than those that are circumferentially smaller.



Thus, taking their cue from the Examiner, Plaintiffs then amended their claims as follows:

"b) a single lower, resilient layer having an upper and a lower major surface, said upper major surface of said single lower resilient layer being disposed adjacent said lower layer of said single, absorbent, woven upper layer, said lower major surface comprising a network of downward projecting bumps interconnected one to another by a resilient grid, said downward projecting bumps comprising bumps having at least two different circumferential sizes, said downward projecting bumps each having a height, said height of bumps having the smaller of said at least two different circumferential sizes being greater than said height of bumps having said larger of said at least two circumferential sizes;"

*Id.* at 41-45. Distinguishing over Zegler, with its "dimples or nodules in FIG. 4-8, which extend away from the face layer 30," Plaintiffs chose to amend their claims to specify that their circumferentially smaller bumps would be taller than their circumferentially larger bumps. In so doing, they relied on their specification stating that, "[i]n still other embodiments, smaller bumps 106b may have a height larger than larger bumps 106a," and added the word "circumference" to their specification to clarify what "larger" modified, i.e., "larger" referred to circumference. *Id.* at 39-40.

Urging allowance of their independent claims, Plaintiffs stated: “Applicants [Plaintiffs] find no recitation of a lower surface configuration as now recited.” *Id.* at 48. In allowing these claims, the Examiner noted that there was no teaching in the prior art of the following: “the ‘downward projecting bumps each having a height, said height of bumps having the smaller of said at least two different circumferential sizes being greater than said height of bumps having said larger of said at least two circumferential sizes’ in combination with the remaining limitations of the claims.” *Id.* at 11-12. Thus, the limitation that the circumferentially smaller bumps must be taller than those that are circumferentially larger was required for allowance.

During prosecution of this matter, Plaintiffs also sought claims directed to the embodiment that included three layers, the third layer being “an interposed impervious member.” This claim was abandoned during prosecution after having been rejected multiple times. *See id.* at 45 (cancelling claim 19, which recited an impervious middle layer).

In sum, in the course of prosecution of the patent in suit, Plaintiffs were required to *inter alia* (i) limit their mat to only two layers; (ii) specify “stitching” as the means for attachment of the layers; (iii) add numerical values; (iv) specify that the circumferentially smaller bumps be taller than the circumferentially larger ones; and (v) abandon patent claims drafted to cover a middle impervious layer.

### **III. PRINCIPLES OF CLAIM CONSTRUCTION**

Claim construction is a two-step process: the court must first interpret the claims and then compare those properly construed claims to the accused products. *SafeTCare Mfg. v. Tele-Made, Inc.*, 497 F.3d 1262, 1268 (Fed. Cir. 2007) (citing *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1454 (Fed. Cir. 1998) (*en banc*)). Interpreting the claims is a matter of law. *Id.* In interpreting claim terms, terms may be, but “are not always[,] afforded their ordinary meaning.” *SkinMedica, Inc. v. Histogen Inc.*, 727 F.3d 1187, 1195 (Fed. Cir. 2013). “If the specification reveals ‘a special

definition given to a claim term by the patentee that differs from the meaning it would otherwise possess[,] . . . the inventor’s lexicography governs.” *Id.* (internal citations omitted). “[R]epeated and definitive remarks in the written description[]” can have the result of “[d]isclaiming the ordinary meaning of the claim term.” *Id.* at 1196 (citing *Computer Docking Station Corp. v. Dell, Inc.*, 519 F.3d 1366, 1374 (Fed. Cir. 2008)).

In interpreting claim terms, a court looks “first to the intrinsic evidence of record, i.e. the patent itself, including the claims, the specification and, if in evidence, the prosecution history.” *PC Connector Sols. LLC v. SmartDisk Corp.*, 406 F.3d 1359, 1362 (Fed. Cir. 2005) (citing *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). “A claim cannot have different meanings at different times; its meaning must be interpreted as of its effective filing date.” *Id.* at 1363 (citing *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 986 (Fed. Cir. 1995) (*en banc*)). A patentee is required to “define precisely what his invention is”; it is “unjust to the public, as well as an evasion of the law, to construe it in a manner different from the plain import of its terms.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (citing *White v. Dunbar*, 119 U.S. 47, 52 (1886); *see also Cont’l Paper Bag Co. v. E. Paper Bag Co.*, 210 U.S. 405, 419 (1908) (“the claims measure the invention”). It is likewise bedrock patent law that limitations from the specification cannot be read into the claims. *Phillips*, 415 F.3d at 1312 (citing *McCarty v. Lehigh Valley R.R. Co.*, 160 U.S. 110, 116 (1895) (warning that one cannot begin the process of importing claim limitations from the specification because one would not know where to stop); *accord E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co.*, 849 F.2d 1430, 1433-34 (Fed. Cir. 1988) (noting that claims cannot be saved by resorting to extraneous limitations from the specification) (citations omitted).

Importantly, “[t]he prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” *Id.* at 1317. Additionally, “[p]rosecution history estoppel prevents a patentee from recapturing under the doctrine of equivalents subject matter surrendered during prosecution to obtain a patent.” *Cross Med. Prods., Inc. v. Medtronic Sofamor Danek, Inc.*, 480 F.3d 1335, 1341 (Fed. Cir. 2007) (citing *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 741, 122 S. Ct. 1831, 152 L. Ed. 2d 944 (2002)). “A patentee’s decision to narrow his claims through amendment may be presumed to be a general disclaimer of the territory between the original claim and the amended claim.” *Festo Corp.*, 535 U.S. at 740. In sum, a narrowing amendment both limits the construction of claim terms to be broader than what was disclaimed and also precludes application of the doctrine of equivalents.

#### IV. TRIMACO’S CLAIM CONSTRUCTION

##### A. The Construction of Key Terms

##### 1. *A non-skid protective cloth or pad, consisting of (claims 1 and 6)*

Trimaco’s construction	Plaintiffs’ construction
A non-skid protective cloth or pad, limited to only two layers, stitched together	A protective cloth or pad which does not slip or slide relative to a surface upon which it is placed, having at least a first protective layer and at least a second non-skid layer

Trimaco proposes that the transitional phrase “consisting of” refers to a non-skid protective cloth or pad that is limited to only two layers, which are stitched together.<sup>3</sup> Only Trimaco’s construction of this claim term is consistent with basic patent law and the intrinsic evidence.

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<sup>3</sup> The parties do not appear to dispute the meaning of non-skid protective cloth.

Plaintiffs' construction comes nowhere close, violating the long-standing rule that the term "consisting of" is closed and ignoring the clear prosecution history showing that "consisting of" was necessary to overcome the prior art showing multilayer non-skid materials.

As the Federal Circuit has stated, "The presumption that a claim term set off by the transitional phrase 'consisting of' is closed to unrecited elements is at least a century old and has been reaffirmed by our court and other courts." *Multilayer Stretch Cling Film Holdings, Inc. v. Berry Plastics Corp.*, 831 F.3d 1350, 1358 (Fed. Cir. 2016). The Federal Circuit noted in *Multilayer* it was "unaware of any case that has construed a patent claim's use of 'consisting of' to have the same meaning as 'comprising.'" *Id.* at 1358-59 & n.3 (citing cases). This legal principle alone should be the beginning and end of the dispute between the parties. "Consisting of" signifies a closed group which, in this case, refers to elements (a), (b), and (c) *only*: a plain woven upper layer, a lower resilient layer, and stitching.

Here, the intrinsic record also confirms that Trimaco's construction is the only possible construction. In particular, to overcome the prior art, Plaintiffs amended their claims to be closed, adding "consisting of" to avoid prior art disclosing multi-layered pads. *See* Parent App. at 139-40, 153. To emphasize the point that the claim is closed—and obviate this objection to the prior art—claim 1 uses the transitional phrase "consisting of" and refers to a "single" absorbent layer and a "single" resilient layer only. The Examiner confirmed that "[a]pplicant has amended the preamble language of the claim by closing up the recitation and making it a *two layered* structure." Parent App. at 122 (emphasis added).

Plaintiffs maintain that the phrase "a non-skid protective cloth or pad, consisting of" indicates that such cloth or pad will have "at least" a first protective layer and "at least" a non-skid layer. This construction thus leaves open the possibility of a multi-layered cloth construction.

Given the plain language of the claim, the transitional phrase “consisting of,” and the prosecution history, Plaintiffs’ construction must be rejected. *See Phillips*, 415 F.3d at 1317 (noting that a patent holder is stuck with narrowing limitations made in prosecution).

As discussed in further detail below, Trimaco’s construction is also consistent with additional claim limitations, such as “adjacent,” which indicates that there are only two layers that overlay one another. There is nothing in the specification or claims to contradict this interpretation. Indeed, the Abstract indicates that the non-skid protective cloth of the invention is a “two-layer design.” The ‘917 patent teaches that, optionally, its invention includes an “impervious member,” but Plaintiffs gave up that embodiment in prosecution. Patent in Suit App. at 45.

Plaintiffs’ suggestion that “at least” be read into the claim to open it back up defies the plain language of the claims and is blatantly contrary to law and the prosecution history.

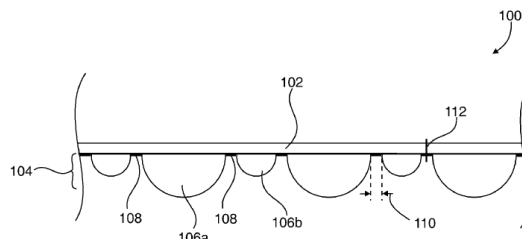
## 2. *Adjacent (claims 1 and 6)*

Trimaco’s construction	Plaintiffs’ construction
The upper major surface of the single lower resilient layer is disposed <i>directly next to or adjoins</i> the lower major surface of the single, absorbent, woven upper layer	Lying near or close to, but not necessarily touching

Trimaco proposes that “adjacent” in the context of “said upper major surface of said single lower resilient layer being disposed adjacent said lower layer” means directly next to or adjoining. First, in the context of the overall claim, it is clear that “adjacent” means “next to” because the claim uses a closed transitional phrase “consisting of.” Thus, adjacent cannot have a broader meaning that would leave room for a third layer, or another structure interposed in between the upper and lower layers.

The specification also supports this interpretation. The layers of the cloth or pad of the patent in suit in Plaintiffs’ claimed configuration are always shown to be “adjacent” in the sense

of directly next to or adjoining. Figure 1, with a woven upper layer (102) and a lower resilient layer (104) that includes downward projecting bumps is instructive:



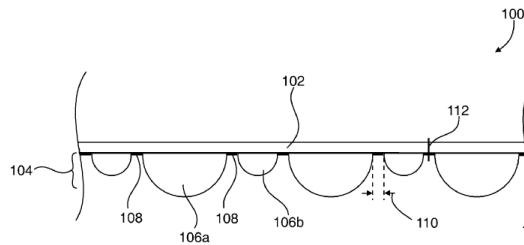
*Figure 1*

Plaintiffs’ Amendment dated September 6, 2012, likewise affirmatively demonstrates that their understanding of the word “adjacent” was directly next to or adjoining. They recited from Zegler that, “‘fusibly compatible’” “‘when referring to two thermoplastics in adjacent layers [i.e., *directly next to one another*] means thermoplastics which can be permanently fused to one another under heat and pressure without any external attachment enhancer . . .’” Parent App. at 74. In recognizing that “adjacent” layers were “fused together,” they recognized that “adjacent” in connection with a layered pad meant directly next to each other such that they could be fused.

**3. *Said downward projecting bumps comprising bumps having at least two different circumferential sizes (claims 1 and 6)***

<b>Trimaco’s construction</b>	<b>Plaintiffs’ construction</b>
The downward projecting bumps have a measurable boundary or perimeter of two or more sizes	Downward projecting bumps where each of the bumps has one of two or more different circumferences

Trimaco’s construction is consistent with the intrinsic evidence, including the claims, specification, and prosecution history. First, the specification itself shows downward projecting bumps with a clearly-definable boundary or perimeter, as shown in Figure 1.



*Figure 1*

Second, the specification clarifies that *circumference* refers to the distance around the downward projecting bumps, as opposed to height:

Referring now also to FIG. 2, lower resilient layer 104 has a plurality of downward-projecting bumps 106a, 106b. Bumps 106a are typically larger in circumference than bumps 106b. As shown in FIG. 1, larger bumps 106a are shown having a greater height than smaller bumps 106b. In alternate embodiments, larger and smaller bumps 106a and 106b, respectively, may have a substantially identical height. In still other embodiments, smaller bumps 106b may have a height larger than larger bumps 106a.

Col. 5, ll. 54-62.

Third, it is clear both in relation to the specification and the claims that to determine which bumps are “smaller” or “greater” in height, a POSITA must first determine their relationship to each other circumferentially, i.e., whether they larger or smaller in circumference. *See* ’917 patent, col. 5, at ll. 54-62. In turn, there must be a boundary or perimeter that is measurable. Without measuring them, a POSITA would not be able to determine whether the bumps were circumferentially “larger” or “smaller.”

Lastly, Trimaco’s construction is also consistent with the plain and ordinary meaning. “Circumference” is defined as “the perimeter of a circle” or “the external boundary or surface of a figure or object,” thus indicating a distance around something that is measurable. *See* Ex. 7 at 3.

Plaintiffs specifically indicated as much when they chose to amend their specification to add the word “circumference” to describe what they meant by “larger” bumps. *See* Ex. 2 at 40.

4. *Said height of bumps having the smaller of said at least two different circumferential sizes being greater than said height of bumps having said larger of said at least two circumferential sizes (claims 1 and 6)*

Trimaco’s construction	Plaintiffs’ construction
Each of the circumferentially smaller bumps has a greater height than that of the circumferentially larger bumps	A first bump of a smaller circumference relative to a second bump of greater circumference has a height that is greater than the height of the second bump

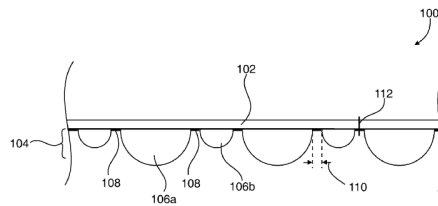
Trimaco’s construction is the only construction consistent with the plain and ordinary meaning of this claim limitation against the backdrop of the intrinsic evidence, in particular the prosecution history.

First, it is clear from a plain reading of the claim limitation in the context of the entire claim that Trimaco’s construction is correct. According to the claim, there are “downward projecting bumps interconnected by a resilient grid” and “downward projecting bumps having at least two circumferential sizes.” These “*said* downward projecting bumps comprising,” i.e., *all of* the downward projecting bumps, have the characteristics specified in the claim language:

said lower resilient layer comprising a network of **downward projecting bumps** interconnected one to another by a resilient grid, **said downward projecting bumps** comprising bumps having at least two different circumferential sizes, **said downward projecting bumps** each having a height, said height of bumps having the smaller of said at least two different circumferential sizes being greater than said height of bumps having said larger of said at least two circumferential sizes

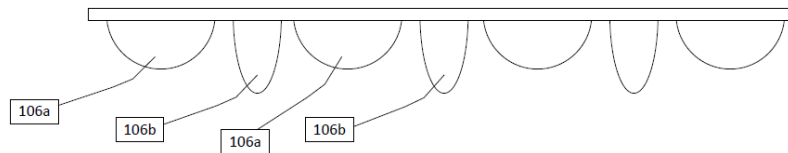
Therefore, there is not a “first bump” and a “second bump,” as Plaintiffs would suggest, or one required instance in which a circumferentially smaller bump is taller. Rather, true to the reference to “bumps”—*plural*—the height of the bumps refers to *all* of the downward projecting

bumps. With respect to *all* of the bumps, the claim specifies that the ones that are circumferentially smaller are taller than the ones that are circumferentially larger. In other words, Plaintiffs claimed exactly the reverse of what is shown in Figure 1, where the circumferentially larger bumps are, more intuitively, the taller bumps.



*Figure 1*

Plaintiffs described this reverse, alternative embodiment to Figure 1, at column 5: “In still other embodiments [other than Figure 1], smaller bumps 106b may have a height larger than larger bumps 106a.” Below is what is described, had it been drawn:

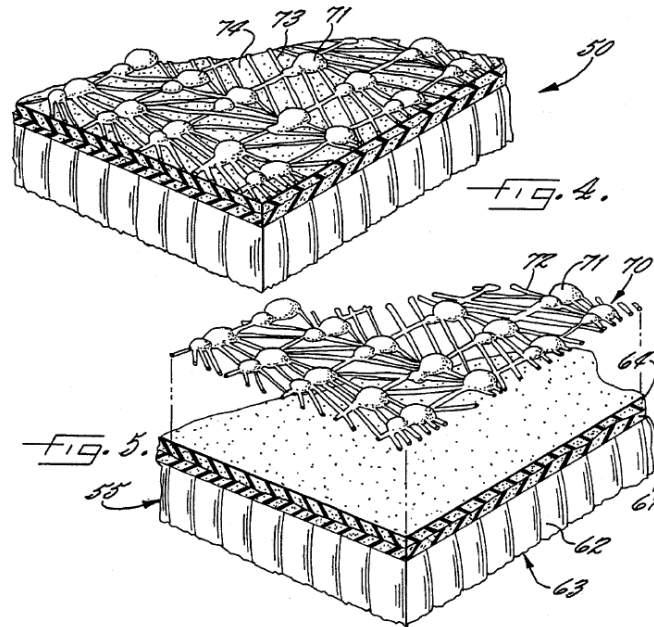


This was patentable because the Examiner did not find it in the prior art, including Zegler.

Plaintiffs’ focus on a single bump as larger than another one is a plain rewrite of the claim language to recapture what it lost in prosecution. Its claims were rejected over and over on the basis of Zegler, which showed, as a general matter, that the circumferentially larger bumps are taller. Plaintiff was thus unable to obtain a claim to cover its Figure 1 embodiment.

In addition, although Zegler generally shows taller bumps that are larger circumferentially, Zegler shows a wide variety of bumps, including likely at least one that is circumferentially

smaller, yet taller in height than another circumferentially larger bump.



Arguing now that only one bump that is smaller circumferentially must be taller than another bump that is larger circumferentially would grossly diminish the impact of Plaintiffs' act of limiting their claim in view of Zegler.

The argument based on Zegler may seem like a technical argument. After all, for the most part, Zegler discloses circumferentially smaller bumps that are generally shorter than circumferentially larger bumps. But it is far from a technicality when Plaintiffs are using the same argument to ensnare Trimaco, namely, that only one smaller bump with a larger circumference would satisfy this limitation. Below is an example (*see esp.* B 1.1 & B1.2) showing what Plaintiffs contend meets the limitation "said height of bumps having the smaller of said at least two circumferential sizes being greater than said height of bumps having said larger of said at least two circumferential sizes."

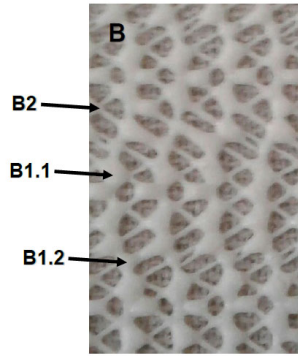


FIG. 4

Ex. 6 (Amended Disclosure of Asserted Claims and Preliminary Infringement Contentions Pursuant to Local Patent Rule 303.1 (dated Aug. 14, 2023)). Adopting a construction that would leave open various configurations of bumps runs headlong into Zegler and must be rejected.

Yet Plaintiffs take the position that this claim is infringed where: "...the sizes and shapes of the downward projecting bumps are virtually unconstrained." Ex. 6 at 8. Not so. Plaintiffs added this specific limitation, and the Examiner agreed that such an embodiment was not in the prior art. To the extent Plaintiffs had the ability to argue a broader interpretation of this claim, they gave that up when they agreed to this amendment. Their agreement was the basis for their claims being allowed. Patent in Suit App. at 11-12.

Their construction must be rejected as contrary to common sense, the plain language, and the prosecution history.

5. *Whereby when said lower major surface of said single lower resilient layer is placed on a support surface, a Sliding Coefficient of Friction measured in accordance with TAPPI T548 specification is greater than approximately 0.75 (claim 1)*

Trimaco's construction	Plaintiffs' construction
Indefinite	When tested in accordance with TAPPI T548, the claimed non-skid protective cloth or pad has a sliding coefficient of greater than approximately 0.75 T548 pm-90.

Pursuant to 35 U.S.C. § 112(b), a patent specification must “conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the [applicant] regards as the invention.” If an applicant fails to satisfy this requirement, the claim is invalid as indefinite. In *Nautilus, Inc. v. Biosig Instruments*, the Supreme Court concluded that a patent claim is indefinite if, when read in light of the specification and the prosecution history, persons of skill in the art are unable with reasonable certainty to understand the scope of the invention. 134 S. Ct. 2120 (2014). Like claim construction, a determination of claim indefiniteness is a legal conclusion that relies on the court’s duty as the construer of the patent claims. *See, e.g., Atmel Corp. v. Info Storage Devices, Inc.*, 198 F.3d 1374, 1378 (Fed. Cir. 1999)).

This limitation, which specifies testing according to TAPPI T548 to determine a “sliding coefficient of friction” value is indefinite. The TAPPI T548 specification as a whole applies to “uncoated writing and printing paper by use of the inclined plane method.” Ex. 3 at 1. Therefore, a POSITA literally cannot follow its test methods. For example, the test methods<sup>4</sup> describe a procedure wherein paper is “measured when sliding against itself.” *Id.* at 1. TAPPI T548 does not inform a POSITA how to carry out the test procedure in relation to the cloth or pad claimed in the ’917 patent. Instead, it begins with the instruction that “one specimen of the paper sample is clamped to an incline plane, the other to a rubber-faced sled.” *Id.* at 2. It further describes preparation of the specimens, going into such detail as how to lift the sheets of paper and cut them in the machine direction. *Id.* at 3. In sum, TAPPI T548 provides no insight whatsoever into testing materials other than paper. Thus, a POSITA is unable, based on the TAPPI T548 test specification, to determine the scope of the claim.

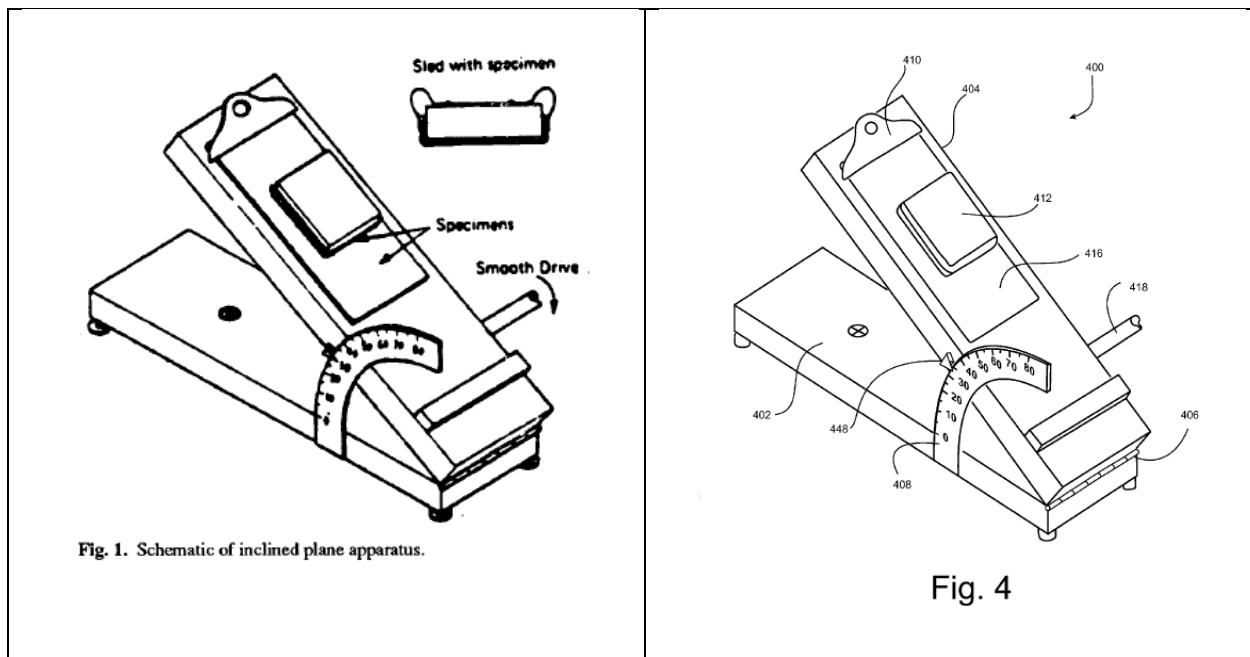
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<sup>4</sup> The TAPPI T548 test method has since been rescinded and is no longer on-line. Ex. 4 at 18.

This flaw dooms Plaintiffs' patent claims. The only way to make any sense of this limitation would be to read in limitations from the specification. But it is a cardinal rule of claim construction that limitations from the specification cannot be read into the claims, even to save their validity. *See, e.g., E.I. du Pont de Nemours*, 849 F.2d at 1434 (“[T]his court’s consistent approach in interpreting claims, and in rejecting resort to extraneous limitations from the specification, should have negated that perception by now.”) (quotations omitted). For this reason alone, this claim limitation is clearly indefinite in providing a test method which, by its terms, does not apply.

There are additional flaws that render this claim limitation incoherent. For example, the term “*sliding* coefficient of friction” is not defined and is not clear from the specification, which uses the term “*sliding* coefficient of friction” and “*static* coefficient of friction.” *Compare* Abstract of the '917 Patent (referring to “*Sliding* Coefficient of Friction greater than 0.75”) with col. 4, ll. 50-54 (“having a *Static* Coefficient of Friction greater than approximately 0.75”). This conflation of the two terms is important because TAPPI refers to these as being different measurements. Ex. 3 at 3. Furthermore, while claim 1 proposes to measure the *sliding* coefficient of friction, TAPPI is used to determine a “*static* coefficient of friction.” This is yet another reason why a POSITA cannot make sense of this claim, and why Plaintiffs have failed to draft claims that are reasonably certain. This claim limitation is also indefinite in stating that the lower major surface of the lower resilient layer is placed on a “support surface” without stating what that surface is. Courts do not rewrite patent claims to correct a patentee’s errors and make sense out of the non-sensical. *See, e.g., Chef America Inc. v. Lamb Weston, Inc.*, 358 F.3d 1371, 1374 (Fed. Cir. 2004) (declining to replace “to” with “at”).

Even if a POSITA were to look at the specification to fill in the details – and this Court opted to improperly read into the claims limitations from the specification – the confusion would remain in view of the discrepancies between the TAPPI test procedure and Plaintiffs’ patent. For example, the patent specification discloses a test run “in accordance with the TAPPI T548 test procedures” in which the lower resilient layer was tested on “laminated wood,” but this is not in the TAPPI T548 test procedure. By way of further example, the TAPPI T548 test method describes a “sled” placed atop the material to be tested, but no sled is mentioned in the specification as related to the TAPPI T548 test. As shown below (left), the TAPPI test procedure depicts a sled placed upon the inclined plane with a specimen (paper) under it. In contrast, Figure 4 from the ’917 specification shows reference number 412 as a “sample.” No sled is shown or described in Fig. 4.



Given that the sled disclosed in the TAPPI T548 procedure weighs 200 grams, the fact of whether it is present or not is highly relevant to the results a POSITA would obtain.

Lastly, no incline rate is specified, even though TAPPI T548 makes clear that for testing paper on paper, the plane must be inclined “at the specified rate” of “at least 45° at a rate of 1.5 ±

0.5°/s.” Once again, Plaintiffs neglect to tell the POSITA whether this parameter is significant to obtain the results identified in the claim or whether their own test results followed a specified rate.

In brief, this claim is indefinite because the TAPPI T548 test procedure, which applies to paper, cannot be followed as the claim instructs. Even if one were to rely on the specification – a reliance that would be improper – the patent in suit provides no guidance about which portion of its disclosed test methods are to be followed versus the TAPPI T548 specification. Thus, the meaning of this limitation cannot be determined with reasonable certainty, and the claim is indefinite.

**6. Amorphous (claims 4 and 9)**

<b>Trimaco’s construction</b>	<b>Plaintiffs’ construction</b>
Having an indefinite shape, but a measurable boundary or perimeter	Irregularly shaped

Claim 1 specifies that the bumps have a circumference. The term “amorphous,” defined as “having no definite form,” however, potentially conflicts with the word “circumference,” which is defined as “the perimeter of a circle” or “the external boundary or surface of a figure or object.” In shorthand, “circumference” suggests a *defined* form (and even a circle) while “amorphous” suggests an *undefined* form. A dependent claim, however, includes all the limitations of the claim it depends from, which is claim 1. Thus, the “amorphous” shape described in claims 4 and 9 must have a circumference according to claim 1.

While this is a close case—one could argue that claims 4 & 9 are indefinite—Trimaco believes that this tension is best resolved based on the intrinsic record by adopting a definition of “amorphous” which, while not a shape such as a circle, triangle, square, or the like, does require a perimeter or boundary that can be measured. *See Athletic Alternatives, Inc. v. Prince Manufacturing, Inc.*, 73 F.3d 1573, 1581 (Fed. Cir.1996) (adopting, in context of Section 112

definiteness standard, the narrower of two equally plausible interpretations). Being able to measure the circumference of an “amorphous” shape is required for a POSITA to determine the scope of the invention in connection with the limitation regarding “smaller” and “larger” bumps. If it were otherwise, a POSITA would have no way to determine whether a particular cloth or pad includes the limitation of claim 1 that, “said downward projecting bumps comprising bumps having at least two different circumferential sizes, said downward projecting bumps each having a height, said height of bumps having the smaller of said at least two different circumferential sizes being greater than said height of bumps having said larger of said at least two circumferential sizes.”

**7. *Whereby when tested in accordance with TAPPI T548 specification, an average slide angle is no less than approximately 40° (claim 6)***

<b>Trimaco’s construction</b>	<b>Plaintiffs’ construction</b>
Indefinite	When tested in accordance with TAPPI T548, the claimed non-skid protective cloth or pad has an average slide angle of no less than approximately 40 degrees. T548 pm-90

This limitation is indefinite for the same reasons as stated above in reference to the limitation that a sliding coefficient of friction is “greater than approximately 0.75” when “measured in accordance with TAPPI T548 specification.” The TAPPI T548 test method applies to paper and thus does not inform a POSITA with reasonable certainty as to the scope of this claim.

Once again, the flaws are numerous. TAPPI T548: (1) describes only a test protocol for paper on paper testing; (2) measures a “static coefficient of friction” rather than a “sliding coefficient of friction”; and (3) does not state how to modify its processes to adapt to other materials such as the two-layered pad recited in claim 6. Even if a POSITA were to look to the patent specification to fill the gaps, reasonable certainty would still be lacking because it is not clear which portions of the TAPPI T548 procedure are to be followed and which discarded.

**V. CONCLUSION**

For the reasons set forth above, the Court should construe the terms the parties dispute as proposed by Trimaco.

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Respectfully submitted,

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**CERTIFICATE OF SERVICE**

I hereby certify that on October 11, 2023, I electronically filed the foregoing *Defendant Trimaco, Inc. 's Opening Claim Construction Brief* with the Clerk of the Court using the CM/ECF system, which will automatically send email notification of such filing to all counsel of record.

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